

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:)	
)	
Gilbert Gorr)	Examiner: Anne R Kubelik
)	
Application Number: 10/089,450)	
)	Art Unit: 1636
Filed: March 29, 2002)	
)	
For: Method for Production of)	
Proteinaceous Substances)	
_____)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Statement of the Substance of the Examiner Interview

Sir:

Applicants thank the Examiner for permitting the telephonic interview conducted on February 25, 2010 with Applicants' attorney of record, Raymond Wagenknecht (Reg. No. 50948). No exhibits were shown. The enablement rejection under 35 U.S.C. § 112, first paragraph, of claims 1-3, 17 and 22-24 was discussed as well as the obviousness rejection under 35 U.S.C. § 103(a) of claims 1-3, 17 and 24. The rejections were discussed compared to the file history and references Reutter and Raskin. No agreement was reached regarding the allowance of any claim.

With respect to the enablement rejection, clarification was requested regarding the rejection of a "signal peptide" (or transit peptide) as set forth in the claims. R. Wagenknecht noted the "signal peptide" language was added to claims 1, 17 and 19 in Amendment D on October 13, 2006 in response to a rejection over claims 1-6 and 17 in the 3/14/2006 Office Action (item 4), which stated

“[T]he specification, while being enabling for a method for the production of secreted proteins in *Physcomitrella* patens by transformation with constructs that encode signal peptides operably linked to proteins, does not reasonably provide enablement for a method for the production of secreted proteins in other mosses or in liverworts or a method for the production of proteins in *Physcomitrella* patens by transformation with constructs that do not encode signal peptides operably linked to the proteins.” (emphasis added)

R. Wagenknecht also noted that the enablement rejection over claims 1-6, 17 and 20-21 in the 1/18/2007 Office Action was modified from the above cited rejection to withdraw rejections pertaining to the “signal peptide” language. Further, all remaining enablement rejections were withdrawn over claims 1-3 and 17 in the 9/24/2007 Office Action.

In response the Examiner stated that withdrawing the enablement rejections pertaining to the “signal peptide” language in the Office Action was an oversight on her part and indicated a “secretion transit peptide” (or secretion signal peptide) should have been required previously.

With respect to the obviousness rejection (35 U.S.C. § 103(a)) of claims 1-3, 17 and 24 over Reutter in view of Raskin, R. Wagenknecht noted that in the Office Action dated 3/14/2006, claims 1-5 and 17-18 were rejected as being obvious over Reutter in view of Raskin. In response, Amendment D filed on October 13, 2006 included a declaration by Reski, which explained at paragraph 47, why one skilled in the art would not likely apply the teachings of Raskin, which pertains to higher order plants having vessels and roots, to lower plants such as mosses and liverworts, which neither have vessels nor roots. Specifically, the Reski Declaration at paragraph 47 summarized that in Raskin the recovered polypeptides were obtained from exudates, which is fluid that oozes out of certain structures of higher order plants, namely roots and leaf hydathodes. Further, paragraph 47 also summarized that *Protonema* have no roots and do not have hydathodes. In the 1/18/2007 Office Action the obvious rejection of claims 1-5 and 17-18 over Reutter in view of Raskin was withdrawn in light of the Reski Declaration and Applicant’s arguments.

In response, the Examiner stated that the obviousness rejection was withdrawn quite some time ago and that in the time since KSR v. Teleflex (“KSR”) was decided the

USPTO required additional time to develop appropriate changes for examination under 35 USC § 103 and thus the rejection was proper.

R. Wagenknecht emphasized that nonetheless, the Examples section of Raskin, namely Table 1, demonstrates that Raskin collected protein from root exudates; however, moss have no roots. Thus, it would be unclear how the reference would apply to moss. As such, the arguments and Reski Declaration would equally apply.

The Examiner's position was that roots were chosen in Raskin's examples because the roots were exposed to the media, which facilitated collection.

Upon further discussion, the Examiner suggested the obvious rejection may be overcome by either a showing that the moss was thought to be different than all other organisms and not secrete proteins outside its cells; or a showing that use of moss in a bioreactor produced secreted proteins at an unexpectedly high rate compared to use of other organisms in such a system including plants, bacteria, fungi etc.

Respectfully submitted,

3/23/2010

Date



Raymond Wagenknecht
Reg. No. 50948

Biotech Beach Law Group PC
5677 Oberlin Dr Ste 204
San Diego, CA 92121
1 (858) 587-2510